

18, and n is an integer of 1 to 5", based on the description in the Specification attached to the Request of the International Application, page 13, lines 3-5, and page 12, lines 13-15 (English translation: page 14, lines 5-7, and page 13, lines 32-33).

(3) In claim 8, "m is an integer of 4 to 20" is amended to read "m is an integer of 6 to 18" based on the description in the Specification attached to the Request of the International Application, page 12, lines 13-15 (English translation: page 13, lines 32-33).

(4) In added claim 14, the photo-polymerization initiator in the photosensitive resin composition of claim 7 is limited to a 2,4,5-triarylimidazole dimer, based on the description in the Specification attached to the Request of the International Application, page 11, lines 2-3 (English translation: page 12, lines 6-7).

(5) In added claim 15, the component (C') in the photosensitive resin composition of claim 7 is limited to a photo-polymerizable compound comprising the compound represented by general formula (V) and additionally a compound represented by general formula (II), based on the description in the Specification attached to the Request of the International Application, page 15 line 29 to page 16, line 3 (English translation: page 18, lines 3-10).

(6) In added claim 16, the binder polymer (A') in the photosensitive resin composition of claim 7 is limited to a carboxyl group-containing binder polymer which comprises copolymerized constituents consisting of 15 to 35 % by weight of methacrylic acid, 10 to 35 % by weight of styrene or a styrene derivative and 30 to 75 % by weight of a monomer represented by the general formula (III), based on the description in the Specification attached to the Request of the International Application, page 19, lines 7-9, and page 9, lines 13-17 (English translation: page 21, lines 15-20, and page 10, line 31 to page 11, line 2).

(7) In added claim 17, the binder polymer (A') in the photosensitive resin composition of claim 7 is limited to a binder polymer having a weight average molecular weight of 30,000 to 80,000, based on the description in the Specification attached to the Request of the International Application, page 19, lines 9-11, and page 10, lines 6-8 (English translation: page 21, lines 20-22, and page 11, lines 27-32).

(8) In added claim 18, the amounts of the component (A'), the component (B) and the component (C') in the photosensitive resin composition of claim 7 are limited, all relative to 100 parts by weight of a total of the component (A') and the component (C'), to 40 to 70 parts by weight of the component (A'), 0.1 to 10 parts by weight of the component (B) and 30 to 60 parts by weight of the component (C'), based on the description in the Specification attached to the Request of the International Application, page 20, lines 11-22 (English translation: page 23, lines 1-18).

(9) In added claim 19, the photo-polymerization initiator in the photosensitive resin composition of claim 8 is limited to a 2,4,5-triarylimidazole dimer, based on the description in the Specification attached to the Request of the International Application, page 11, lines 2-3 (English translation: page 12, lines 6-7).

(10) In added claim 20, the component (C'') in the photosensitive resin composition of claim 8 is limited to a photo-polymerizable compound comprising the compound represented by general formula (VI) and additionally a compound represented by general formula (II), based on the description in the Specification attached to the Request of the International Application, page 15 line 29 to page 16, line 3 (English translation: page 18, lines 3-10).

(11) In added claim 21, the binder polymer (A') in the photosensitive resin composition of claim 8 is limited to a carboxyl group-containing binder polymer which comprises

copolymerized constituents consisting of 15 to 35 % by weight of methacrylic acid, 10 to 35 % by weight of styrene or a styrene derivative and 30 to 75 % by weight of a monomer represented by the general formula (III), based on the description in the Specification attached to the Request of the International Application, page 19, lines 7-9, and page 9, lines 13-17 (English translation: page 21, lines 15-20, and page 10, line 31 to page 11, line 2).

(12) In added claim 22, the binder polymer (A') in the photosensitive resin composition of claim 8 is limited to a binder polymer having a weight average molecular weight of 30,000 to 80,000, based on the description in the Specification attached to the Request of the International Application, page 19, lines 9-11, and page 10, lines 6-8 (English translation: page 21, lines 20-22, and page 11, lines 27-32).

(13) In added claim 23, the amounts of the component (A'), the component (B) and the component (C'') in the photosensitive resin composition of claim 8 are limited, all relative to 100 parts by weight of a total of the component (A') and the component (C''), to 40 to 70 parts by weight of the component (A'), 0.1 to 10 parts by weight of the component (B) and 30 to 60 parts by weight of the component (C''), based on the description in the Specification attached to the Request of the International Application, page 20, lines 11-22 (English translation: page 23, lines 1-18).

(14) In added claim 24, the photo-polymerizable compound (C) in the photosensitive resin composition of claim 1 is limited to a photo-polymerizable compound comprising the compound represented by general formula (I) and additionally 2,2-bis[4-(acryloxypolyethoxy)phenyl]propane or 2,2-bis[4-(methacryloxypolyethoxy)phenyl]propane, based on the description in the Specification attached to the Request of the International Application, page 16, line 29 to page 17,

line 5 (English translation: page 19, lines 12-19) and Examples.

(15) In added claim 25, the photo-polymerizable compound (C') in the photosensitive resin composition of claim 7 is limited to a photo-polymerizable compound comprising the compound represented by general formula (V) and additionally 2,2-bis[4-(acryloxypolyethoxy)phenyl]propane or 2,2-bis[4-(methacryloxypolyethoxy)phenyl]propane, based on the description in the Specification attached to the Request of the International Application, page 16, line 29 to page 17, line 5 (English translation: page 19, lines 12-19) and Examples.

(16) In added claim 26, the photo-polymerizable compound (C'') in the photosensitive resin composition of claim 8 is limited to a photo-polymerizable compound comprising the compound represented by general formula (VI) and additionally 2,2-bis[4-(acryloxypolyethoxy)phenyl]propane or 2,2-bis[4-(methacryloxypolyethoxy)phenyl]propane, based on the description in the Specification attached to the Request of the International Application, page 16, line 29 to page 17, line 5 (English translation: page 19, lines 12-19) and Examples.

#### 6. List of Attached Documents

Claim: new sheets of pages 29, 31, 32, 33, 33/1, 33/2 and 33/3 (new sheets of English translation: pages 33, 35, 36, 37, 37/1, 37/2 and 37/3)

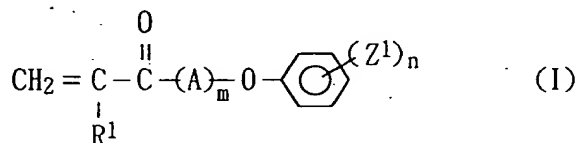
## CLAIMS

1. (Amended) A photosensitive resin composition comprising

(A) a carboxyl group-containing binder polymer which  
5 contains styrene or a styrene derivative as a copolymerized  
constituent,

(B) a photo-polymerization initiator, and

(C) a photo-polymerizable compound having in its  
molecule at least one polymerizable ethylenically unsaturated  
10 bond which comprises a compound represented by the general  
formula (I)



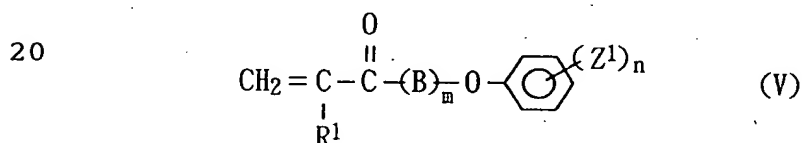
15 wherein  $\text{R}^1$  is a hydrogen atom or a methyl group, A is an  
alkylenoxy group of 2 to 6 carbon atoms,  $\text{Z}^1$  is a halogen  
atom, an alkyl group of 1 to 20 carbon atoms, a cycloalkyl  
20 group of 3 to 10 carbon atoms, an aryl group of 6 to 14  
carbon atoms, an amino group, an alkylamino group of 1 to 10  
carbon atoms, a dialkylamino group of 2 to 20 carbon atoms, a  
nitro group, a cyano group, a mercapto group, an  
alkylmercapto group of 1 to 10 carbon atoms, an allyl group,  
25 a hydroxyalkyl group of 1 to 20 carbon atoms, a carboxyalkyl  
group wherein the alkyl group has 1 to 10 carbon atoms, an  
acyl group having an alkyl group of 1 to 10 carbon atoms, an  
alkoxy group of 1 to 20 carbon atoms or a group containing an  
heterocyclic group, m is an integer of 6 to 20, and n is an  
30 integer of 0 to 5.

2. The photosensitive resin composition of claim 1, wherein  
the photo-polymerization initiator as the component (B) is a  
2,4,5-triarylimidazole dimer.

polymer which contains styrene or a styrene derivative as copolymerized constituent and has a weight average molecular weight of 30,000 to 80,000.

5 6. The photosensitive resin composition of claim 1, which comprises 40 to 70 parts by weight of the component (A), 0.1 to 10 parts by weight of the component (B) and 30 to 60 parts by weight of the component (C) relative to 100 parts by weight of a sum total of the component (A) and the component  
10 (C).

7. (Amended) A photosensitive resin composition comprising  
(A') a binder polymer,  
(B) a photo-polymerization initiator, and  
15 (C') a photo-polymerizable compound having in its molecule at least one polymerizable ethylenically unsaturated bond which comprises a compound represented by the general formula (V)



wherein R<sup>1</sup> is a hydrogen atom or a methyl group, B is an ethylenoxy group, Z<sup>1</sup> is a halogen atom, an alkyl group of 1  
25 to 20 carbon atoms, a cycloalkyl group of 3 to 10 carbon atoms, an aryl group of 6 to 14 carbon atoms, an amino group, an alkylamino group of 1 to 10 carbon atoms, a dialkylamino group of 2 to 20 carbon atoms, a nitro group, a cyano group, a mercapto group, an alkylmercapto group of 1 to 10 carbon  
30 atoms, an allyl group, a hydroxyalkyl group of 1 to 20 carbon atoms, a carboxyalkyl group wherein the alkyl group has 1 to 10 carbon atoms, an acyl group having an alkyl group of 1 to 10 carbon atoms, an alkoxy group of 1 to 20 carbon atoms or a group containing an heterocyclic group, at least one Z<sup>1</sup> is an

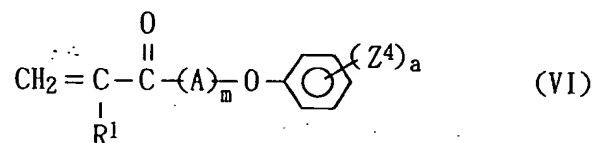
alkyl group of 1 to 20 carbon atoms, m is an integer of 6 to 18, and n is an integer of 1 to 5.

8. (Amended) A photosensitive resin composition comprising

5 (A') a binder polymer,

(B) a photo-polymerization initiator, and

(C'') a photo-polymerizable compound having in its molecule at least one polymerizable ethylenically unsaturated bond which comprises a compound represented by the general  
10 formula (VI)



15 wherein R<sup>1</sup> is a hydrogen atom or a methyl group, A is an alkylenoxy group of 2 to 6 carbon atoms, Z<sup>4</sup> is an alkyl group of 1 to 20 carbon atoms, m is an integer of 6 to 18, and a is an integer of 1 to 5.

20 9. A photosensitive element produced by applying the photosensitive resin composition of claim 1, 7 or 8 to a support and then drying the photosensitive resin composition to form a photosensitive resin composition layer.

25 10. The photosensitive element of claim 9, wherein a protective film is applied to the photosensitive resin composition layer.

30 11. A process for producing a resist pattern comprising laminating the photosensitive element of claim 9 on a substrate to be processed for forming a circuit with the photosensitive resin composition layer placed in contact with the substrate, exposing the photosensitive resin composition  
35 layer by irradiating it with an active ray in a pattern of an

image to radiation-cure exposed areas of the photosensitive resin composition layer, and then developing by removing unexposed areas of the photosensitive resin composition layer.

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12. The process of claim 11, wherein a protective film is applied to the photosensitive resin composition layer, and wherein the photosensitive element is laminated on the substrate while the protective film is being peeled off from the photosensitive resin composition layer.

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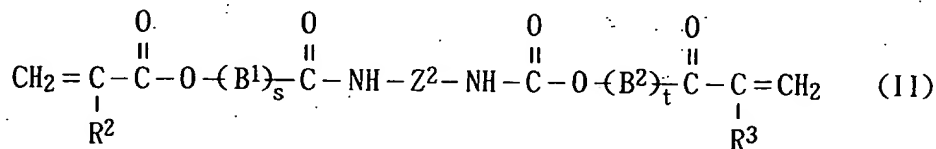
13. A process for producing a printed wiring board, comprising etching or plating the substrate bearing the resist pattern produced by the process of claim 11.

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14. (Added) The photosensitive resin composition of claim 7, wherein the photo-polymerization initiator as the component (B) is a 2,4,5-triarylimidazole dimer.

15. (Added) The photosensitive resin composition of claim 7, wherein the component (C') is a photo-polymerizable compound having in its molecule at least one polymerizable ethylenically unsaturated bond, which comprises a compound represented by the general formula (V) and a compound represented by the general formula (II)

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wherein  $\text{R}^2$  and  $\text{R}^3$  each independently are a hydrogen atom or an alkyl group of 1 to 6 carbon atoms,  $\text{B}^1$  and  $\text{B}^2$  each independently are an alkylenoxy group of 2 to 6 carbon atoms,  $\text{Z}^2$  is a divalent hydrocarbon group of 1 to 16



carbon atoms, and s and t each independently are an integer of 1 to 28.

16. (Added) The photosensitive resin composition of claim 7,  
5 wherein the component (A') is a carboxyl group-containing binder polymer which contains a styrene derivative as a copolymerized constituent and comprises copolymerized constituents consisting of 15 to 35 % by weight of  
10 methacrylic acid, 10 to 35 % by weight of styrene or a styrene derivative and 30 to 75 % by weight of a monomer represented by the general formula (III)



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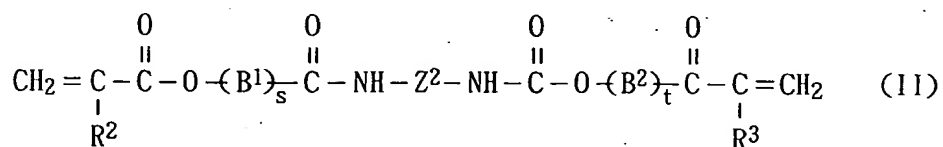
wherein R<sup>5</sup> is a hydrogen atom or a methyl group, and R<sup>6</sup> is an alkyl group of 1 to 12 carbon atoms.

17. (Added) The photosensitive resin composition of claim 7,  
20 wherein the component (A') is a carboxyl group-containing binder polymer which contains styrene or a styrene derivative as a copolymerized constituent and has a weight average molecular weight of 30,000 to 80,000.

- 25 18. (Added) The photosensitive resin composition of claim 7, which comprises 40 to 70 parts by weight of the component (A'), 0.1 to 10 parts by weight of the component (B) and 30 to 60 parts by weight of the component (C') relative to 100 parts by weight of a sum total of the component (A') and the  
30 component (C').

19. (Added) The photosensitive resin composition of claim 8, wherein the photo-polymerization initiator as the component (B) is a 2,4,5-triarylimidazole dimer.

20. (Added) The photosensitive resin composition of claim 8, wherein the component (C'') is a photo-polymerizable compound having in its molecule at least one polymerizable ethylenically unsaturated bond, which comprises a compound represented by the general formula (VI) and a compound represented by the general formula (II)



wherein R<sup>2</sup> and R<sup>3</sup> each independently are a hydrogen atom or an alkyl group of 1 to 6 carbon atoms, B<sup>1</sup> and B<sup>2</sup> each independently are an alkyleneoxy group of 2 to 6 carbon atoms, Z<sup>2</sup> is a divalent hydrocarbon group of 1 to 16 carbon atoms, and s and t each independently are an integer of 1 to 28.

21. (Added) The photosensitive resin composition of claim 8, wherein the component (A') is a carboxyl group-containing binder polymer which contains a styrene derivative as a copolymerized constituent and comprises copolymerized constituents consisting of 15 to 35 % by weight of methacrylic acid, 10 to 35 % by weight of styrene or a styrene derivative and 30 to 75 % by weight of a monomer represented by the general formula (III)



wherein R<sup>5</sup> is a hydrogen atom or a methyl group, and R<sup>6</sup> is an alkyl group of 1 to 12 carbon atoms.

22. (Added) The photosensitive resin composition of claim 8, wherein the component (A') is a carboxyl group-containing

binder polymer which contains styrene or a styrene derivative as a copolymerized constituent and has a weight average molecular weight of 30,000 to 80,000.

5 23. (Added) The photosensitive resin composition of claim 8, which comprises 40 to 70 parts by weight of the component (A'), 0.1 to 10 parts by weight of the component (B) and 30 to 60 parts by weight of the component (C'') relative to 100 parts by weight of a sum total of the component (A') and the  
10 component (C'').

24. (Added) The photosensitive resin composition of claim 1, which further contains 2,2-bis[4-(acryloxypolyethoxy)phenyl]propane or 2,2-bis[4-(methacryloxypolyethoxy)phenyl]propane as a photo-  
15 polymerizable compound having in its molecule at least one polymerizable ethylenically unsaturated bond.

25. (Added) The photosensitive resin composition of claim 7, which further contains 2,2-bis[4-(acryloxypolyethoxy)phenyl]propane or 2,2-bis[4-(methacryloxypolyethoxy)phenyl]propane as a photo-  
20 polymerizable compound having in its molecule at least one polymerizable ethylenically unsaturated bond.

26. (Added) The photosensitive resin composition of claim 8, which further contains 2,2-bis[4-(acryloxypolyethoxy)phenyl]propane or 2,2-bis[4-(methacryloxypolyethoxy)phenyl]propane as a photo-  
30 polymerizable compound having in its molecule at least one polymerizable ethylenically unsaturated bond.